Treviño et al.   S/N: 09/683,130

REMARKS

Claims 1-31 are pending in the present application. In the Office Action mailed December 3, 2004, the Examiner rejected claims 1-18 under 35 U.S.C. §102(e) as being anticipated by Wu et al. (USP 6,687,527). The Examiner next rejected claims 19-24 under 35 U.S.C. §103(a) as being unpatentable over Wu et al. Claims 25-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wu in view of Seybold (USP 5,877,758).

The Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Wu et al. Applicant has amended claim 1 to define over the prior art.

Wu et al. states that "[t]ypically, the first user input after loading a sequence from memory 68 will be the entering of a new selectable parameter value." Col. 15, lns. 1-3. The new parameter value is then "verified to be within the minimum and maximum limits. . . ." Col. 15, lns. 3-5. Wu et al. teaches that the system updates the parameter value upon receiving an acceptable value, calculates and updates any changed parameter limits and monitor parameter values affected by the changed selectable parameter, and reformats the display areas. See col. 15, lns. 23-29. Wu et al. further states that "[b]y reviewing the monitor parameters and/or selected operating curves in the second display area 200, 300, 400, 420 after the step 510 recalculates the monitor parameter values to reflect the changed selectable parameter value, the user easily recognizes the effect of the change." Col. 15, lns. 35-39.

Amended claim 1 calls for, in part, receiving a scan parameter input, comparing the scan parameter input to a reference value, determining a state of validity of a number of remaining scan parameters, and notifying a user of if any state of validity is out of a predefined range for the scan parameter input before updating the number of remaining scan parameters. Contrary to that taught in Wu et al., claim 1 calls for a method whereby a user is notified before updating the number of remaining scan parameters of whether a state of validity is outside a predefined range. In this regard, the remaining scan parameters are not updated and the user then notified of a validity issue. In contrast to Wu et al., user notification occurs before parameter updating. That is, Wu et al. teaches user recognition of change effects after updating those parameter values affected by the changed selectable parameter on the second display area. In fact, Wu et al. teaches an "undo" option to "cancel a change and return to the previous set of selectable parameters." See col. 15, lns. 35-48. That is, the system of Wu et al. changes the remaining parameters and then allows a user to "undo" these changes if the result of the change is unacceptable. Therefore, given that Wu et al. does not teach notifying a user if any state of validity is out of a predefined range for the scan parameter input before updating the number of

7

REMARKS

Claims 1-31 are pending in the present application. In the Office Action mailed December 3, 2004, the Examiner rejected claims 1-18 under 35 U.S.C. §102(e) as being anticipated by Wu et al. (USP 6,687,527). The Examiner next rejected claims 19-24 under 35 U.S.C. §103(a) as being unpatentable over Wu et al. Claims 25-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wu in view of Seybold (USP 5,877,758).

The Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Wu et al. Applicant has amended claim 1 to define over the prior art.

Wu et al. states that "[t]ypically, the first user input after loading a sequence from memory 68 will be the entering of a new selectable parameter value." Col. 15, lns. 1-3. The new parameter value is then "verified to be within the minimum and maximum limits. . . ." Col. 15, lns. 3-5. Wu et al. teaches that the system updates the parameter value upon receiving an acceptable value, calculates and updates any changed parameter limits and monitor parameter values affected by the changed selectable parameter, and reformats the display areas. See col. 15, lns. 23-29. Wu et al. further states that "[b]y reviewing the monitor parameters and/or selected operating curves in the second display area 200, 300, 400, 420 after the step 510 recalculates the monitor parameter values to reflect the changed selectable parameter value, the user easily recognizes the effect of the change." Col. 15, lns. 35-39.

Amended claim 1 calls for, in part, receiving a scan parameter input, comparing the scan parameter input to a reference value, determining a state of validity of a number of remaining scan parameters, and notifying a user of if any state of validity is out of a predefined range for the scan parameter input before updating the number of remaining scan parameters. Contrary to that taught in Wu et al., claim 1 calls for a method whereby a user is notified before updating the number of remaining scan parameters of whether a state of validity is outside a predefined range. In this regard, the remaining scan parameters are not updated and the user then notified of a validity issue. In contrast to Wu et al., user notification occurs before parameter updating. That is, Wu et al. teaches user recognition of change effects after updating those parameter values affected by the changed selectable parameter on the second display area. In fact, Wu et al. teaches an "undo" option to "cancel a change and return to the previous set of selectable parameters." See col. 15, lns. 35-48. That is, the system of Wu et al. changes the remaining parameters and then allows a user to "undo" these changes if the result of the change is unacceptable. Therefore, given that Wu et al. does not teach notifying a user if any state of validity is out of a predefined range for the scan parameter input before updating the number of

7

remaining scan parameters, claim 1 and the claims that depend therefrom are deemed patentably distinct therefrom.

The Examiner rejected claim 9 under 35 U.S.C. §102(e) as being anticipated by Wu et al. Before addressing the Examiner's rejection, Applicant directs the Examiner's attention to claims 9 and 10, which have been amended to correct typographical errors regarding the spelling of "hierarchically".

Wu et al. teaches displaying available sequences to a user. Col. 13, lns. 59-63. After the user selects a sequence, "the sequence parameters are retrieved from the database memory 68. . . ." Col. 14, lns. 20-22. Minimum and maximum limit values fore each selectable parameter are calculated by the user interface processor. See col. 14, lns. 42-45. The Examiner stated that "[t]he user selects a template that corresponds to what type of scan shall be performed; this selection determines which parameters are most important (highest priority) and which are less important." Office Action, para. 11. Applicant believes the Examiner has mischaracterized that disclosed by Wu et al. relating to that which is claimed.

Claim 9 calls for, in part, determining a plurality of scan parameters specific to the scan session and hierarchically prioritizing the plurality of scan parameters for the scan session. That is, the plurality of scan parameters determined specific to the scan session are hierarchically prioritized after being determined. Selecting a sequence of scan parameters from a database of available sequences does not hierarchically prioritize the plurality of scan parameters for the scan session. That is, the plurality of scan parameters for the scan session are not hierarchically prioritized by merely selecting a scan parameter sequence.

Wu et al. teaches that a user can select a desired scan parameter set from a data repository available in a master database memory. See col. 13, lns. 58-67. The master database memory may contain only a single sequence of scan parameters or a plurality of sequences pre-designed or stored from previous imaging sessions. See col. 14, lns. 28-37. Wu et al. teaches that "[p]referably, an entire set of values for the selectable parameters that govern the operation of the MRI apparatus are retrieved, as opposed to retrieving only values for those parameters included in the sub-set of selectable parameters that are displayed in the first display area 100." Col. 14, lns. 22-27. One skilled in the art would recognize that choosing one sequence out of a plurality of sequences prioritizes the set of values for the selectable parameters, but the scan parameters themselves are not prioritized as called for in claim 9.

Wu et al. fails to teach hierarchically prioritizing the determined plurality of scan parameters for the scan session. That is, Wu et al. fails to teach hierarchically arranging the

8

Trevino et al.   S/N: 09/683,130

plurality of scan parameters in order of importance once the scan parameters are determined for a specific scan. Following the retrieval of the selectable parameter values, "the user interface processor 60 calculates minimum and maximum limit values for each selectable parameter..." Col. 14, lns. 42-45. Wu et al. also teaches calculation of monitor parameter values. Col. 14, lns. 45-46. Though monitor parameter values and limit values for each selectable parameter are calculated, Wu et al. fails to teach hierarchical prioritization of the scan parameters. That is, Wu et al. teaches user selection of a sequence and determining parameters for that selected sequence. A number of the parameters are variable, and these are presented to the user for selection of a value. However, Wu et al. does not teach prioritizing or ranking the parameters. Further, simply making the values of the parameter selectable by a user is not a prioritizing. That is, Wu et al. does not teach or suggest that the selectable parameters are of more import than non-selectable parameters. For this reason, claim 9 and the claims that depend therefrom are deemed patentably distinct therefrom.

The Examiner rejected claim 19 under 35 U.S.C. §103(a) as being unpatentable over Wu et al. Applicant has amended claim 19 to call for, in part, displaying an indication of the at least one effect on the GUI prior to modification of the another scan parameter. As stated above with respect to claim 1, Wu et al. teaches user recognition of change effects _after_ updating those parameter values affected by the changed selectable parameter on the second display area. That is, Wu et al. does not teach or suggest displaying an indication of the at least one effect on the GUI _prior_ to modification of the another scan parameter. Accordingly, claim 19 and the claims that depend therefrom are deemed patentably distinct from Wu et al.

The Examiner rejected claim 25 under 35 U.S.C. §103(a) as being unpatentable over Wu et al. in view of Seybold. Applicant has amended claim 25 to call for, in part, a computer programmed to display on the console if there is any consequence of modifying the at least one of the plurality of options on another option before modifying the another option. As stated above, Wu et al. teaches user recognition of change effects _after_ updating those parameter values affected by the changed selectable parameter on the second display area. That is, Wu et al. does not teach or suggest a computer programmed to display on the console if there is any consequence of modifying the at least one of the plurality of options on another option _before_ modifying the another option.

Seybold teaches "[a] control device for adjusting multiple parameters associated with an element or item of a user interface in an easy and intuitive manner." Abstract. Seybold fails to teach or suggest a computer programmed to display on the console if there is any consequence of
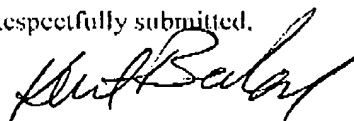
9

modifying the at least one of the plurality of options on another option before modifying the another option.

Neither Wu et al. nor Seybold taken singly or in combination teach or suggest a computer programmed to display on the console if there is any consequence of modifying the at least one of the plurality of options on another option before modifying the another option. Therefore, claim 25 and the claims that depend therefrom are deemed patentably distinct therefrom.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-31.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

Kent L. Baker
Registration No. 52,584
Phone 262-376-5170 ext. 15
klb@zpspatents.com

Dated: March 3, 2005
Attorney Docket No.: GEMS8081.107

P.O. ADDRESS:
Ziolkowski Patent Solutions Group, LLC
14135 North Cedarburg Road
Mequon, WI 53097-1416
262-376-5170

10